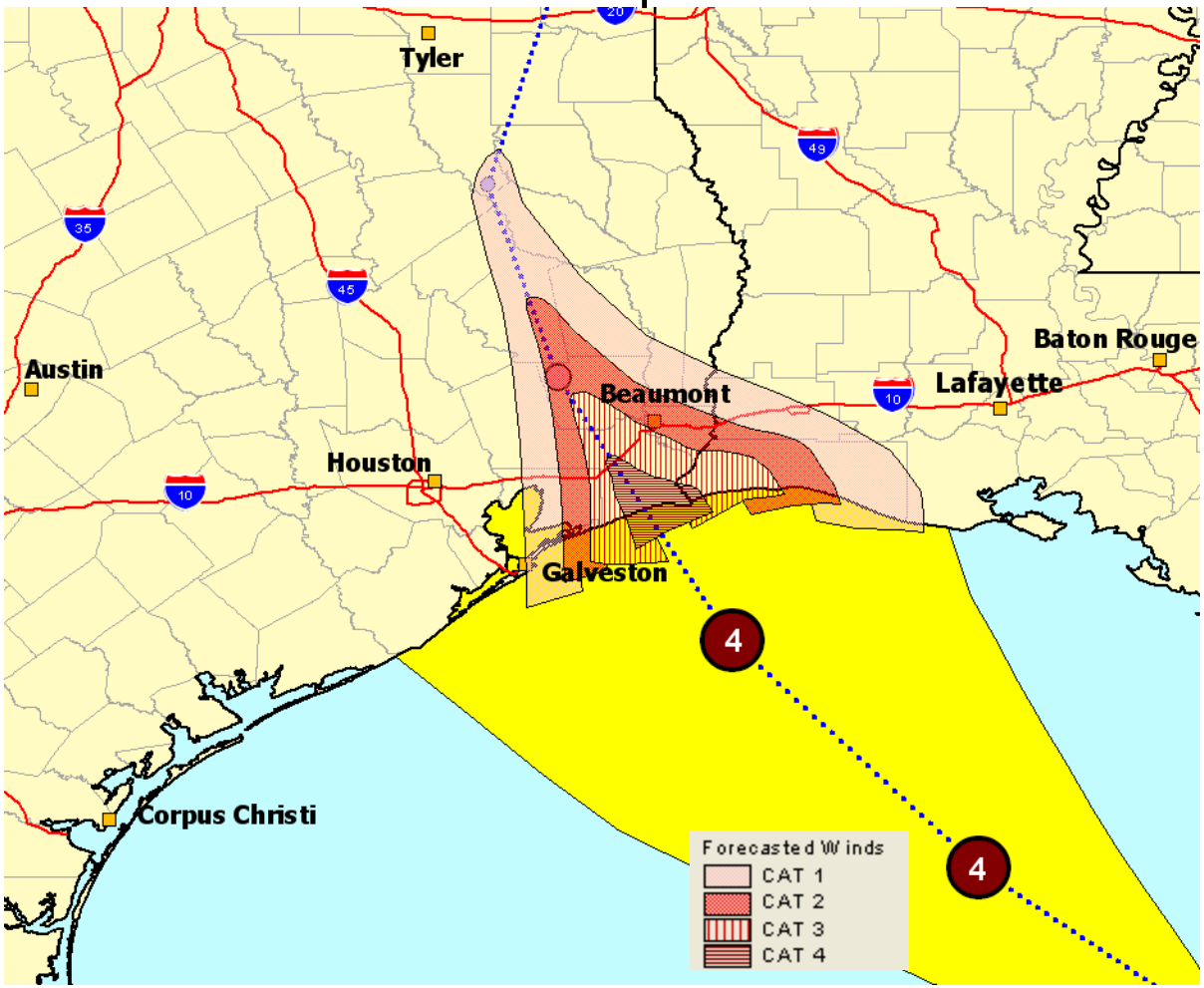
Hurricane Rita Wind Distribution

Landfall Expected In About **24** Hours

For Official Use Only!



Most Probable Landfall Wind Distribution

This model is based on a Category 4 storm making landfall to the west of Port Arthur, TX.

Information provided on this page displays a Category 4 storm making landfall to the west of Port Arthur, TX. These projections are based on information from the NHC ***(0500 EDT 09/23/2005)*** forecast.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Rita Wind Fields

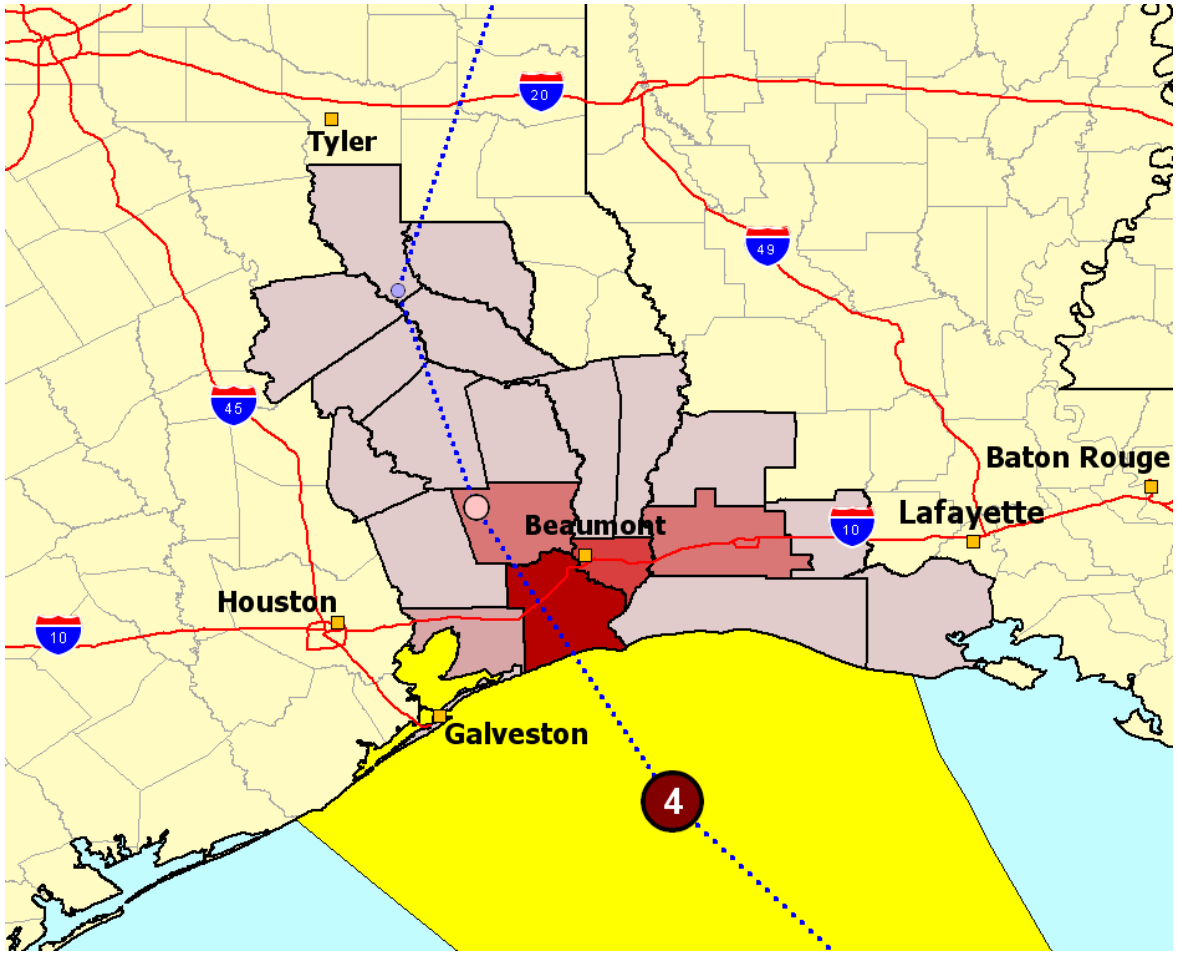
Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Rita Debris Model

Landfall Expected In About **24** Hours

For Official Use Only!



Most Probable Landfall Debris Model Results

Louisiana – 379,000 yd^3
Texas – 7,117,000 yd^3

Model results per county on following page

This model is based on a Category 4 storm making landfall to the west of Port Arthur, TX.

Information provided on this page displays a Category 4 storm making landfall to the west of Port Arthur, TX. These projections are based on information from the NHC ***(0500 EDT 09/23/2005)*** forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Rita Debris Model

Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Rita Debris Model

Landfall Expected In About **24** Hours

For Official Use Only!

State	County/Parish	Yards Per County/Parish
Louisiana	Beauregard	1,000
	Calcasieu	283,000
	Cameron	93,000
	Jeff'n Davis	1,000
	Vermilion	1,000
Louisiana - Total		379,000
Texas	Angelina	53,000
	Cameron	1,000
	Chambers	102,000
	Cherokee	4,000
	Galveston	54,000
	Hardin	348,000
	Houston	1,000
	Jasper	23,000
	Jefferson	5,743,000
	Liberty	59,000
	Nacogdoches	2,000
	Newton	7,000
	Orange	626,000
	Polk	54,000
	San Jacinto	1,000
	Trinity	3,000
	Tyler	36,000
Texas - Total		7,117,000
TOTAL		7,496,000

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Rita Debris Model

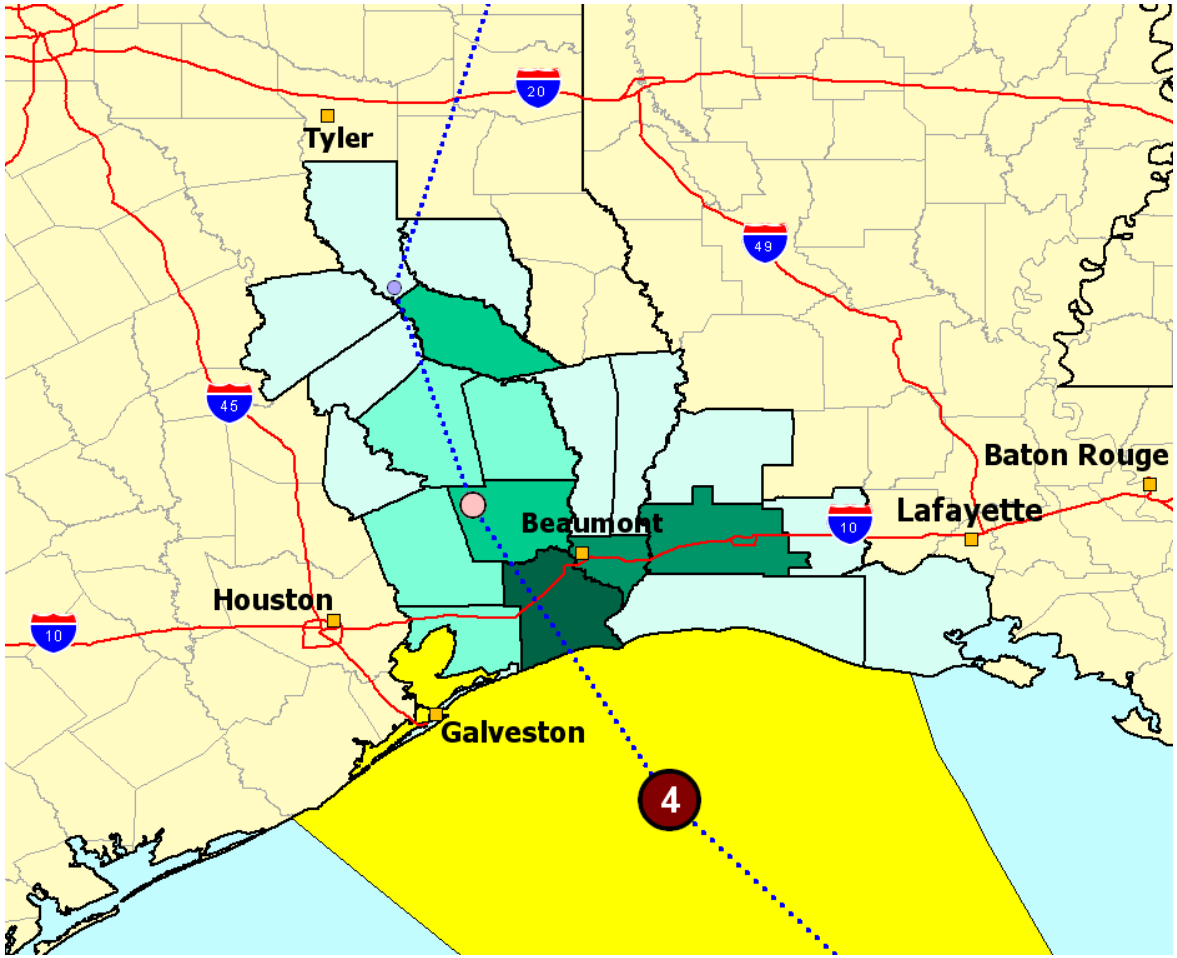
Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Rita Ice Model

Landfall Expected In About **24** Hours

For Official Use Only!



Most Probable Landfall Ice Model Results

Louisiana –
4 Truckloads Day One
8 Truckloads Day Two
16 Truckloads Day Three

Texas –
13 Truckloads Day One
26 Truckloads Day Two
52 Truckloads Day Three

Model results per county on following page

This model is based on a Category 4 storm making landfall to the

Information provided on this page displays a Category 4 storm making landfall to the west of Port Arthur, TX. These projections are based on information from the NHC ***(0500 EDT 09/23/2005)*** forecast. The amount of ice forecasted is based on Mission Guide Book requirements (8 pounds per day per person) and Ice SME input and represents a first day daily need.

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers	**Hurricane Rita Ice Model**
Generated By: Paul Deatrick, LRL 0700 EDT 09/23/2005	
Sources: HURREVAC LRL-DEBRIS	Page 4 of 15

Hurricane Rita Ice Model

Landfall Expected In About **24** Hours

For Official Use Only!

State	County/Parish	Pounds Per County/Parish - Day 3	Truckloads per County/Parish - Day 3
Louisiana	Beauregard	1,000	1
	Calcasieu	459,000	12
	Cameron	31,000	1
	Jeff'n Davis	2,000	1
	Vermilion	1,000	1
Louisiana - Total			16
Texas	Angelina	111,000	3
	Chambers	52,000	2
	Cherokee	7,000	1
	Galveston	45,000	2
	Hardin	154,000	4
	Houston	1,000	1
	Jasper	34,000	1
	Jefferson	806,000	21
	Liberty	79,000	2
	Nacogdoches	3,000	1
	Newton	14,000	1
	Orange	272,000	7
	Polk	60,000	2
	San Jacinto	1,000	1
	Trinity	5,000	1
	Tyler	57,000	2
Texas - Total			52
TOTAL		2,195,000	68

The amount of ice forecasted is based on Mission Guide Book requirements (8 pounds per person) and Ice SME input and represents a first day daily need. The assumption in this scenario is that 40% of the resident population affected by Rita will have power outage in this area will cause a need for ice.

Details about this model may be obtained at

https://englink.usace.army.mil

or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Rita Ice Model

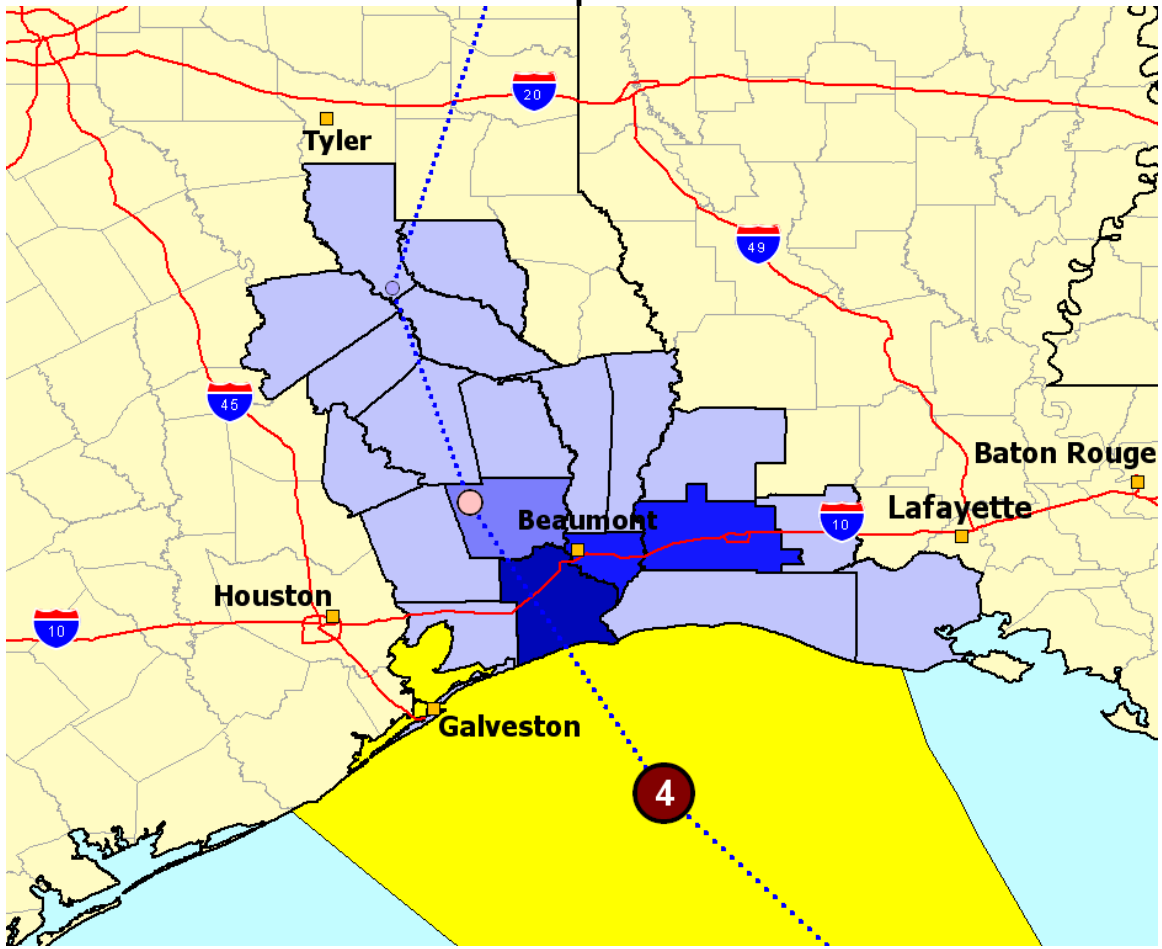
Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Rita Water Model

Landfall Expected In About **24** Hours

For Official Use Only!



Most Probable Landfall Water Model Results

Louisiana –
4 Truckloads Day One
8 Truckloads Day Two
16 Truckloads Day Three

Texas –
13 Truckloads Day One
26 Truckloads Day Two
52 Truckloads Day Three

Model results per county on following page

This model is based on a Category 4 storm making landfall to the west of Port Arthur, TX.

Information provided on this page displays a Category 4 storm making landfall to the west of Port Arthur, TX. These projections are based on information from the NHC ***(0500 EDT 09/23/2005)*** forecast. The amount of water forecasted is based on Mission Guide Book requirements (3 liters per person per day) and Water SME input and represents a first day daily need.

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Rita Water Model

Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Rita Water Model

Landfall Expected In About **24** Hours

For Official Use Only!

State	Truckloads Per State	County/Parish	Liters Per County/Parish - Day 3	Truckloads per County/Parish - Day 3
Louisiana		Beauregard	1,000	1
		Calcasieu	172,000	12
		Cameron	12,000	1
		Jeff'n Davis	1,000	1
		Vermilion	1,000	1
Louisiana - Total	16			16
Texas		Angelina	42,000	3
		Chambers	20,000	2
		Cherokee	3,000	1
		Galveston	17,000	2
		Hardin	58,000	4
		Houston	1,000	1
		Jasper	13,000	1
		Jefferson	302,000	21
		Liberty	29,000	2
		Nacogdoches	1,000	1
		Newton	5,000	1
		Orange	102,000	7
		Polk	22,000	2
		San Jacinto	1,000	1
		Trinity	2,000	1
		Tyler	21,000	2
Texas - Total	52			52
TOTAL	68		826,000	68

The amount of water forecasted is based on Mission Guide Book requirements (3 liters per person) and Water SME input and represents a first day daily need. The assumption in this scenario is that 40% of the resident population affected by Rita will have power outage in this area will cause a need for water.

Details about this model may be obtained at https://englink.usace.army.mil

or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Rita Water Model

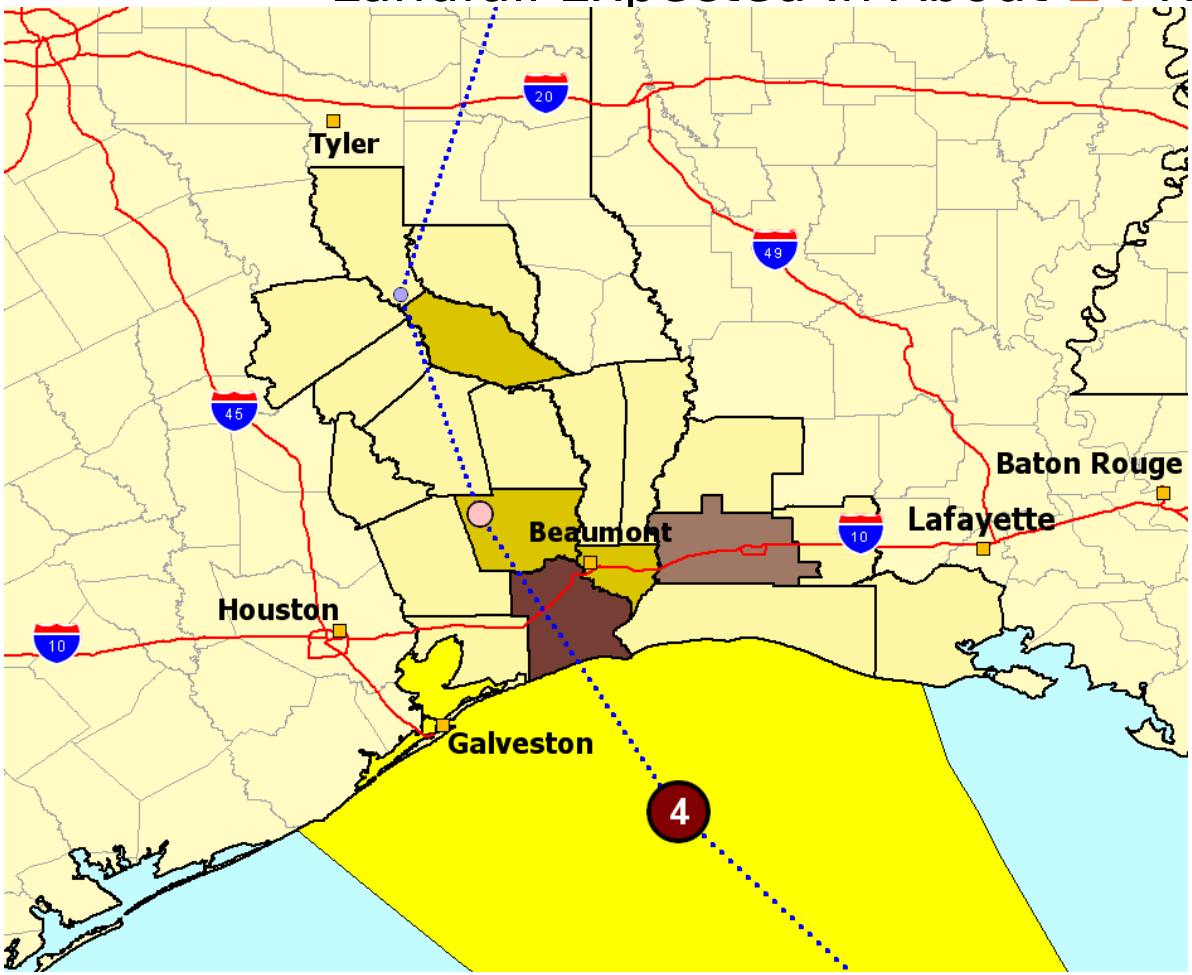
Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Rita Population Model

Landfall Expected In About **24** Hours

For Official Use Only!



Most Probable Landfall Population Model Results

Louisiana – 155,000 persons
Texas – 527,000 persons

Model results per county on following page

This model is based on a Category 4 storm making landfall to the

Information provided on this page displays a Category 4 storm making landfall to the west of Port Arthur, TX. These projections are based on information from the NHC ***(0500 EDT 09/23/2005)*** forecast. The number of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values).

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers **Hurricane Rita Population Model**

Generated By: Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources: HURREVAC LRL-DEBRIS

Hurricane Rita Population Model

Landfall Expected In About **24** Hours

For Official Use Only!

State	County/Parish	Population Per County/Parish
Louisiana	Beauregard	1,000
	Calcasieu	142,000
	Cameron	10,000
	Jeff'n Davis	1,000
	Vermilion	1,000
Louisiana		155,000
Texas	Angelina	35,000
	Cameron	1,000
	Chambers	16,000
	Cherokee	2,000
	Galveston	14,000
	Hardin	48,000
	Houston	1,000
	Jasper	11,000
	Jefferson	246,000
	Liberty	22,000
	Nacogdoches	1,000
	Newton	5,000
	Orange	85,000
	Polk	19,000
	San Jacinto	1,000
	Trinity	2,000
	Tyler	18,000
Texas		527,000
TOTAL		682,000

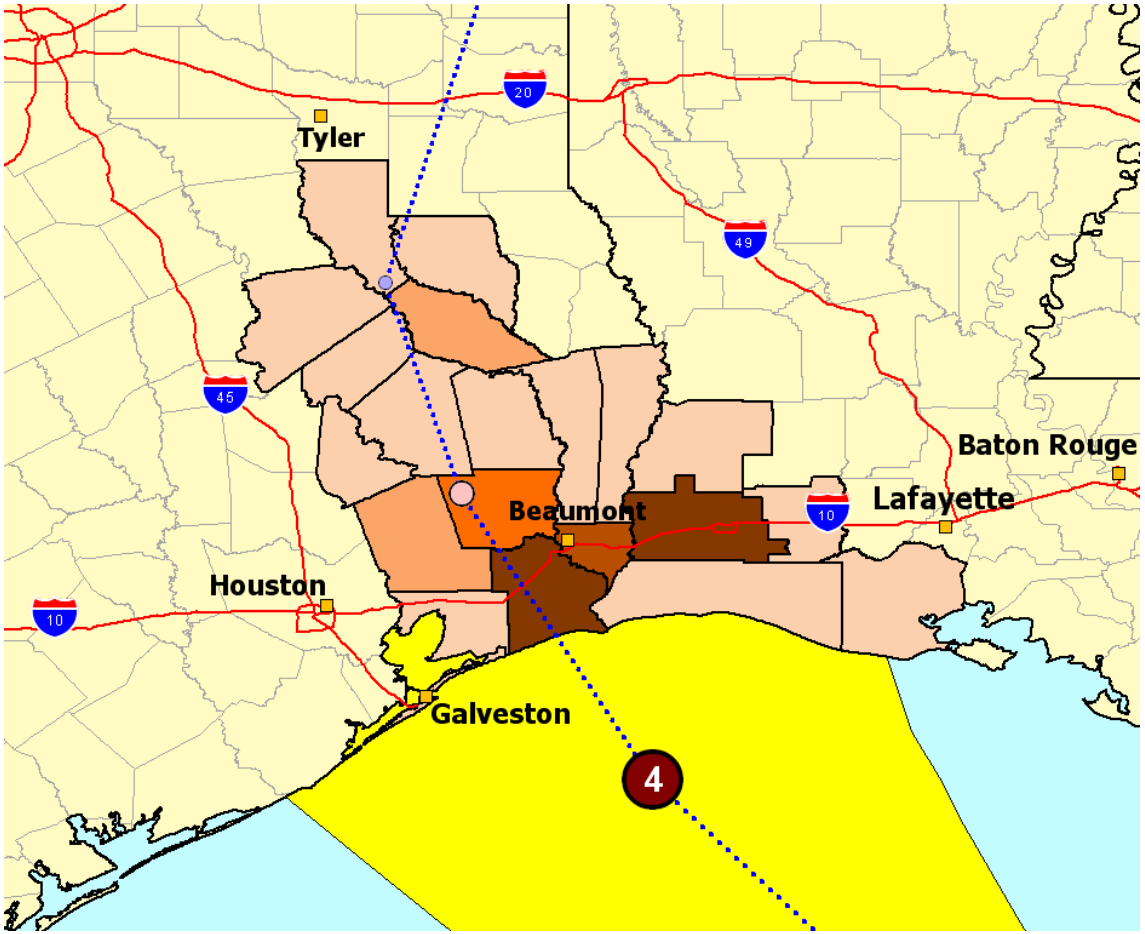
The number of persons estimated to be within hurricane force winds comes from Census 2000 values.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Rita Households Model

Landfall Expected In About **24** Hours

For Official Use Only!



Most Probable Landfall Households Model Results

Louisiana – 60,000 households
Texas – 201,000 households

Model results per county on following page

This model is based on a Category 4 storm making landfall to the west of Port Arthur, TX.

Information provided on this page displays a Category 4 storm making landfall to the west of Port Arthur, TX. These projections are based on information from the NHC ***(0500 EDT 09/23/2005)*** forecast. The number of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values).

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Rita Households Model

Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Rita Households Model

Landfall Expected In About **24** Hours

For Official Use Only!

State	County/Parish	Households Per County/Parish
Louisiana	Beauregard	1,000
	Calcasieu	54,000
	Cameron	3,000
	Jeff'n Davis	1,000
	Vermilion	1,000
Louisiana - Total		60,000
Texas	Angelina	12,000
	Cameron	1,000
	Chambers	6,000
	Cherokee	1,000
	Galveston	6,000
	Hardin	18,000
	Houston	1,000
	Jasper	4,000
	Jefferson	93,000
	Liberty	8,000
	Nacogdoches	1,000
	Newton	2,000
	Orange	32,000
	Polk	7,000
	San Jacinto	1,000
	Trinity	1,000
	Tyler	7,000
Texas - Total		201,000
TOTAL		261,000

The number of households estimated to be within hurricane force winds comes from Census 2000 values.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

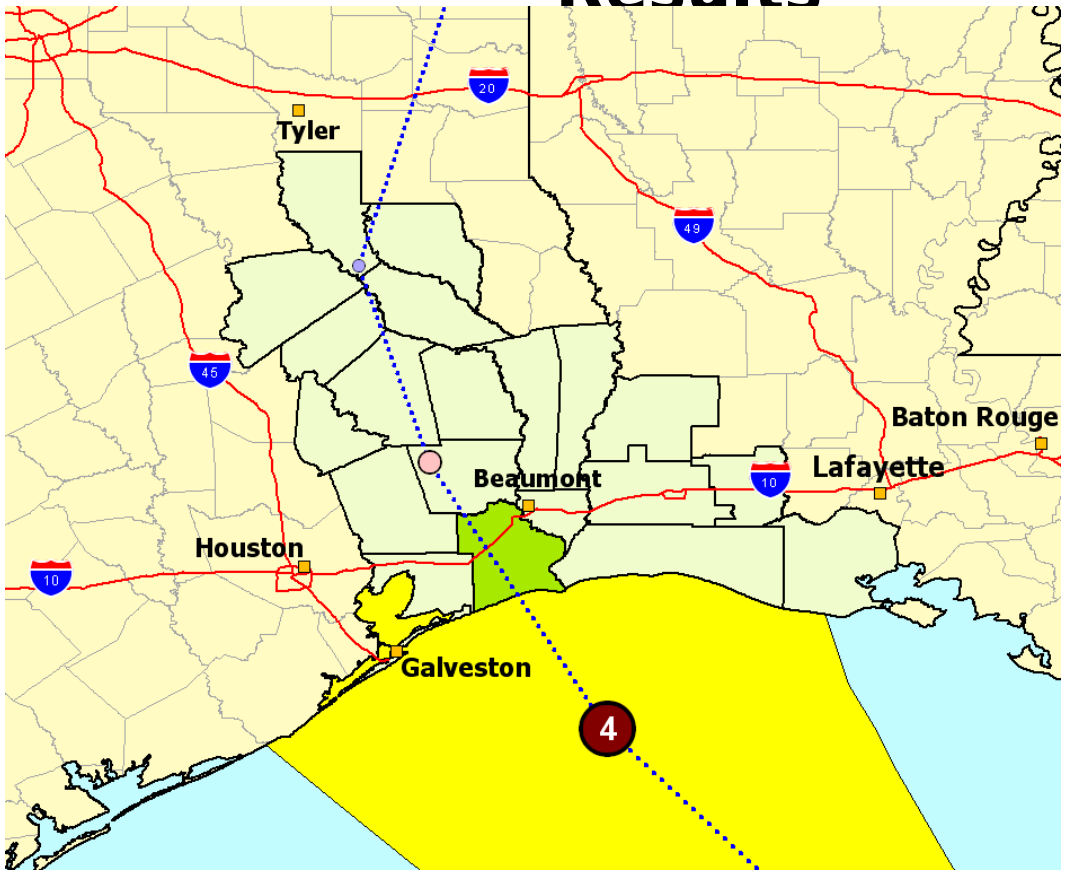
Hurricane Rita Households Model

Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Rita Temporary Roofing Model Results

For Official Use Only!



Most Probable Landfall Temporary Roofing Model Results

Louisiana – 1000
Texas – 7400

Model results per county on following page

This model is based on a Category 4 storm making landfall to the west of Port Arthur, TX.

Information provided on this page displays a Category 4 storm making landfall to the west of Port Arthur, TX. These projections are based on information from the NHC ***(0500 EDT 09/23/2005)*** forecast. The amount of temporary roofing that may be required is based on 1% of housing units damaged in CAT 1 wind areas, 3% of housing units damaged in CAT 2 wind areas, 5% of housing units damaged in CAT 3 wind areas, and 7% of housing units damaged in CAT 4 wind areas. This only indicates possible need – not necessarily a mission to repair roofs.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Rita Roofing Model

Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Rita Temporary Roofing Model Results

For Official Use Only!

La[illegible]lours

State	County/Parish	House Units Per County/Parish
Louisiana	Beauregard	100
	Calcasieu	600
	Cameron	100
	Jeff'n Davis	100
	Vermilion	100
Louisiana - Total		1000
Texas	Angelina	100
	Chambers	100
	Cherokee	100
	Galveston	100
	Hardin	500
	Houston	100
	Jasper	100
	Jefferson	4600
	Liberty	100
	Nacogdoches	100
	Newton	100
	Orange	1000
	Polk	100
	San Jacinto	100
	Trinity	100
	Tyler	100
Texas - Total		7400
TOTAL		8400

THIS IS AN EXPERIMENTAL MODEL !! THE VALUES ARE PRELIMINARY AND SHOULD BE CONSIDERED A GUIDE BUT NOT AN ABSOLUTE VALUE !!

The amount of temporary roofing that may be required is based on 1% of housing units damaged in CAT 1 wind areas, 3% of housing units damaged in CAT 2 wind areas, 5% of housing units damaged in CAT 3 wind areas, and 7% of housing units damaged in CAT 4 wind areas. This only indicates possible need – not necessarily a mission to repair roofs.

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

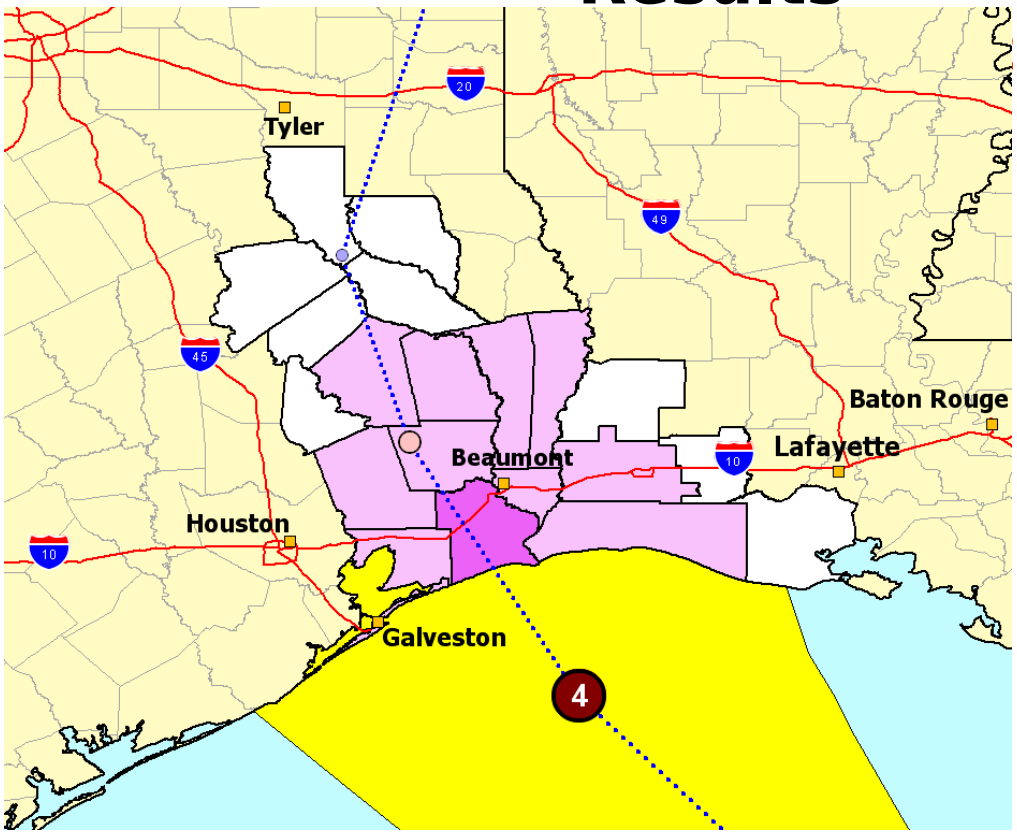
Hurricane Rita Roofing Model

Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Rita Temporary Housing Model Results

For Official Use Only!



4 Hours

Most Probable Landfall Temporary Housing Model Results

Louisiana – 500
Texas – 6100

Model results per county on following page

This model is based on a Category 4 storm making landfall to the west of Port Arthur, TX.

Information provided on this page displays a Category 4 storm making landfall to the west of Port Arthur, TX. These projections are based on information from the NHC (***0500 EDT 09/23/2005***) forecast. The amount of temporary housing that may be required is based on no housing need in CAT 1 wind area, 2% of housing units requiring temporary replacement in CAT 2 wind areas, 4% of housing units requiring temporary replacement in CAT 3 wind areas, and 6% of housing units requiring temporary replacement in CAT 4 wind areas.

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Rita Housing Model

Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Rita Temporary Housing Model Results

For Official Use Only!

L Hours

State	County/Parish	House Units Per County/Parish
Louisiana	Beauregard	100
	Calcasieu	100
	Cameron	100
	Jeff'n Davis	100
	Vermilion	100
Louisiana - Total		500
Texas	Angelina	100
	Chambers	100
	Cherokee	100
	Galveston	100
	Hardin	400
	Houston	100
	Jasper	100
	Jefferson	3,700
	Liberty	100
	Nacogdoches	100
	Newton	100
	Orange	700
	Polk	100
	San Jacinto	100
	Trinity	100
	Tyler	100
Texas - Total		6,100
TOTAL		6,600

THIS IS AN EXPERIMENTAL MODEL !! THE VALUES ARE PRELIMINARY AND SHOULD BE CONSIDERED A GUIDE BUT NOT AN ABSOLUTE VALUE !!

The amount of temporary housing that may be required is based on no housing need in CAT 1 wind areas, 2% of housing units requiring replacement in CAT 2 wind areas, 4% of housing units requiring replacement in CAT 3 wind areas, and 6% of housing units requiring replacement in CAT 4 wind areas.

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

US Army Corps of Engineers

Hurricane Rita Housing Model

Generated By:
Paul Deatrick, LRL 0700 EDT 09/23/2005

Sources:
HURREVAC
LRL-DEBRIS